REMARKS

In the office action, the examiner objected to the abstract of the disclosure on the ground that it is formed by more than one paragraph. Accordingly, the applicant has amended the abstract of the disclosure to correct the informalities.

In this opportunity, the applicant has amended the specification to correct minor errors therein. This is to verify that no new matter has been introduced by this amendment.

Claims 1-3 are currently pending. In the office action, the examiner rejected Claims 2 and 3 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. It is stated that many elements in Claims 2 and 3 lack antecedent basis. In the international phase of the instant case, dependent Claims 2 and 3 inadvertently failed to reference to independent Claim 1, which causes the antecedent basis problem. Accordingly, the applicant has amended Claim 2 and 3 to correct the dependency and to more clearly define the invention.

In the office action, the examiner rejected Claim 1 under 35 U.S.C. 102(b) as being anticipated by Walter (U.S. Patent No. 2,875,628). The examiner rejected Claim 1 under 35 U.S.C. 102(b) as being anticipated by Yukio (JP 49-70378). The examiner rejected Claim 2 under 35 U.S.C. 102(b) as being anticipated by Voelkl (U.S. Patent No. 2,936,641). The examiner rejected Claim 3 under 35 U.S.C. 102(b) as being anticipated by Gallup (U.S. Patent No.

295,536). Accordingly, the applicant has amended Claims 1-3 to more clearly differentiate the present invention from the technologies disclosed by the cited references.

More specifically, the applicant has amended Claim 1 to include the features that have been recited in Claims 2 and 3 with respect to the intermediary transfer wheel feeding device and the reciprocal movement mechanism, respectively. The feature regarding the structure of the intermediary transfer wheel feeding device is supported by the original disclosure of the instant application, for example, in page 20, paragraphs [0051] and [0052] with reference to Figure 5, which reads as follows:

> As shown in Figures 4(a), (c) and Figures 5(a)-(c), a feeding member 25 is formed at an end of a moving arm 24. The feeding member 25 has a front feeding piece 26 and a rear feeding piece 27 which respectively face a front surface and a rear surface of the intermediary transfer wheel 16. A small gap s is formed between the front surface and the rear surface of the intermediary transfer wheel 16 and the front feeding piece 26 and the rear feeding piece 27 so that smooth rotation is achieved by decreasing friction with the front feeding piece 26 and the rear feeding piece 27 upon the rotation of the intermediary transfer wheel 16.
>
> The moving arm 24 is arranged at the bottom of the support shaft 17 along the support shaft 17, and its base end is connected to a drive mechanism 28 that drives the moving arm 24 back-and-forth along the support shaft 17. The drive mechanism 28 can take any mechanism as long as it can drive the moving arm 24 linearly back-and-forth. Such an example is shown in Figures 5(b) and (c).

The feature regarding the operation of the reciprocal movement mechanism is supported by the original disclosure of the instant application, for example, in page 3, paragraphs [0008] and original claim 3, which reads as follows:

> The support shaft is moveable by a reciprocal movement mechanism to locations close to or away from the first turning transmission wheel and the second turning transmission wheel, where the intermediary transfer wheel contacts with the first turning transmission wheel and the second turning transmission wheel when the support shaft is located at the close location, and the intermediary transfer wheel is separated from the first turning transmission wheel and the second turning transmission wheel when the support shaft is located at the away location.

In addition, the applicant has clarified that (1) in the first location, the intermediary transfer wheel contacts with the side peripheral surfaces of the first and second turning transmission wheels, and in the second location, the intermediary transfer wheel separates from the side peripheral surfaces of the first and second turning transmission wheels, and (2) the control unit controls the operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism. The feature (1) is supported by the paragraph [0008] noted above where the "location close to" and the "location away from" are rephrased by the "first location" and the "second location", respectively. The feature (2) regarding the control unit 6 is supported by the original disclosure, for example, by Figure 6 and associated descriptions in the specification. Because of these features, the transmission that can continuously change the speed without steps while performing a clutch function for switching ON/OFF to transmit the rotation of a power device can be achieved.

None of the cited references show the features of the present invention noted above. The cited Walter reference (U.S. Patent No.

2,875,628) shows a variable speed transmission with use of a large number of gears. Since the transmission of the cited Walter reference uses the gears, it is fundamentally different from the transmission of the present invention which continuously change the speed by friction of the surfaces. Further, since there is no reciprocal movement mechanism for switching between the first location and the second location of the intermediary transfer wheel for bringing the intermediary transfer wheel for contacting or non-contacting with the first and second turning transmission wheels, the transmission of the cited Walter reference cannot function as a clutch. Moreover, a component that corresponds to the intermediary transfer wheel feeding device of the present invention is a handle which is manually operated by a user. Thus, the transmission of the Walter reference does not have the control unit of the present invention for controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism.

Similarly, although the surface friction is utilized, in the continuous transmission disclosed by the cited Yukio reference (JP 49-70378), since there is no reciprocal movement mechanism for switching between the first location and the second location of the intermediary transfer wheel for bringing the intermediary transfer wheel for contacting or non-contacting with the first and second turning transmission wheels, the transmission of the cited Walter reference cannot function as a clutch. Further, a component that

corresponds to the intermediary transfer wheel feeding device of the present invention is a handle which is manually operated by a user. Thus, the transmission of the cited Yukio reference does not have the control unit of the present invention for controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism.

The transmission disclosed by the cited Voelkl reference (U.S. Patent No. 2,936,641) is basically the same as that of the cited Walter reference. Since the transmission of the cited Voelkl reference uses the gears, it is fundamentally different from the transmission of the present invention which continuously change the speed by friction of the surfaces. Further, since there is no reciprocal movement mechanism for switching between the first location and the second location of the intermediary transfer wheel for bringing the intermediary transfer wheel for contacting or non-contacting with the first and second turning transmission wheels, the transmission of the cited Voelkl reference cannot function as a clutch. Moreover, a component that corresponds to the intermediary transfer wheel feeding device of the present invention is a handle which is manually operated by a user. Thus, the transmission of the Voelkl reference does not have the control unit of the present invention for controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism.

The cited Gallup reference (U.S. Patent No. 295,536) shows a variable speed transmission with use of a cone shaped gear. Since the transmission of the cited Gallup reference uses the gears, it is fundamentally different from the transmission of the present invention which continuously change the speed by friction of the surfaces. Further, since there is no reciprocal movement mechanism for switching between the first location and the second location of the intermediary transfer wheel for bringing the intermediary transfer wheel for contacting or non-contacting with the side surfaces of the first and second turning transmission wheels, the transmission of the cited Walter reference cannot function as a clutch. Moreover, a component that corresponds to the intermediary transfer wheel feeding device of the present invention is a lever which is manually operated by a user. Thus, the transmission of the Walter reference does not have the control unit of the present invention for controlling operations of the reciprocal movement mechanism and the intermediary transfer wheel feeding mechanism.

As discussed above, none of the cited references shows the features of the present invention taken singly or in combination, thus the rejections under 35 U.S.C. 102(b) is no longer applicable to the present invention.

The applicant has amended Claim 2 which now defines the information provided to the control unit. This feature is supported by the original disclosure in the paragraph [0067] which reads as follows:

For example, when the transmission 36 in the embodiment 2 is applied to a drive system of a vehicle as will be described later, brake information (a signal indicating control condition of the brake), accelerator information (a signal indicating acceleration condition by the accelerator), power information (a signal indicating the operational condition of the power system), and load information (a signal indicating the magnitude of the load), etc. are input to the control device 47. The control device 47 is able to control the drive mechanism 28 or the reciprocal movement mechanism 40 based on the condition of these signals.

The applicant has amended Claim 3 which now defines the structure of the feeding member. This feature is supported by the original disclosure in the paragraph [0051] as noted above:

Under the circumstances, the applicant believes that the present application is in the condition for allowance, and the applicant respectfully requests that the present application be allowed and passed to issue.

Respectfully submitted,

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